A SHARED VISION ON USER EXPERIENCES
ON MICS, NERVES, MADONNA AND MORE

Mieke van der Bijl-Brouwer* & Stella Boess
University of Twente/ Delft University of Technology
*m.vanderbijl-brouwer@utwente.nl

ABSTRACT

This workshop introduces the Envisioning Use technique which is aimed at generating a shared vision on user experiences in product development teams. This shared vision could support decision making with regard to user experiences and inspire solution generation by making team members more dedicated to designing experiences.

Keywords: user experience, design teams, context of use

Imagine you had the task of designing a wireless presentation microphone. Imagine it would have to evoke positive user experiences, such as confidence and control. What do you know about experiencing this kind of product? Would you think of the times you had to use a presentation microphone yourself, feeling nervous in front of a large crowd of conference visitors? Would you think of the way Madonna looks when she's wearing the wireless microphone while dancing and singing during a concert? Would you think of the way the mic allowed that key-note speaker to present in her own lively way? Would you know what you did not know about other people experiencing presentation microphones? And if you were working in a team, would you ask your colleagues about their experiences with presentation microphones?

If you were designing a presentation microphone in a team, everyone on the team would have his or her own ideas about user experiences and the related context of use of the presentation microphone. We therefore developed the Envisioning Use technique that enables members of a (multidisciplinary) product development team to create a shared vision on user experiences. In the workshop at the Design & Emotion conference we introduce this technique to participants and discuss and explore which other possible means there are to create a shared vision on user experiences.

OBJECTIVES

Supporting the creation of a shared vision on user experiences is necessary because currently there is a gap in practice between product researchers and the members of a development team that have to incorporate user needs in a product design (Sleeswijk Visser, van der Lugt et al., 2007; Norman, 2010). Furthermore, in our studies of how designers deal with product use in practice (Boess, 2009; Van der Bijl-Brouwer and Boess, 2010), we found that practicing designers do not only use knowledge from end-users, but also use knowledge about product use from previous projects or their own personal experiences. They apply this knowledge as a frame of reference in informal evaluation techniques such as testing with colleagues, family or themselves. These informal tests need little preparation time, which means results of the test can easily be integrated in solution generation, thus supporting an iterative design process. However, we also found that the knowledge often stays implicit and is not shared with team members.

The Envisioning Use technique is a half-day workshop in which members of a product development team come together and share their knowledge and assumptions on current user experiences and create a vision on desired future user experiences. It allows the exploration of different types of user experience including aesthetic experiences, experience of meaning and emotional experiences (Desmet and

Hekkert, 2007). To be able the circumstances (Green and Jordan, 2002), the workshops allows explicit exploration of experiences in relation to their context of use. A shared vision on user experiences could support decision making processes with regard to this issue, and could inspire the generation of solutions.

WORKSHOP CHARACTERISTICS

The Envisioning Use technique is a workshop in which team members access their implicit knowledge in different structured steps. The basic principles are a focus on use situations rather than product characteristics, exploring situation- use issue relationships and reflecting on what you know and what you don't know.

FOCUS ON USE SITUATIONS IN STORIES AND SCENARIOS

The main goal of the workshop is to share knowledge of product use. This kind of knowledge can be represented in different formats such as user insights, user specifications etc. In this workshop we work with representations of use that are as close as possible to actual use situations, namely stories and scenarios. Following Erickson (2006) stories are something that actually happened (or could have happened) to a real person or fleshed-out protagonist. Scenarios are something that could happen to an assumed person, and that is being projected on a more or less well-known future situation. These formats have proved to be very useful as a means of communication and are easy to remember and refer to in later design stages. Another reason for working with stories and scenarios is that the workshop looks at user-product interaction on the level of use situations rather than product details. The rise of digital technology has revealed the need for paying more attention to use situations because of the wealth of new possibilities, but also because of the less direct connection between perceivable qualities of objects and interaction details.

EXPLORING USE SITUATION – USE ISSUE RELATIONSHIPS

In the course of the workshop, the participants develop an explicit representation of product use. In this 'product use mind map' stories of use are explicitly connected to specific use issues which explain the desired experience aspect of a certain scenario. For example, for the design of a presentation microphone, the scenario 'putting on the headset when wearing an updo hair style' leads to issues such as 'feeling embarrassed that the headset gets tangled up in the hair' and 'feeling disappointed that the headset does not match the hairstyle'. This issue-situation structure makes it possible to analyse and explore how different user experience issues are related to different contexts of use. Moreover, this kind of representation makes it easier to quickly represent issues and to organize them on a flip chart wall.

Picture of product use mind map or example of situation, issue

REFLECTION ON KNOWLEDGE

The product development process is directed by decisions about the design problem and design solution. These decisions are preferably based on information but in some occasions not all information is available while the decision needs to be made to move forwards. Making decisions based on assumptions is then the strategy used to cope with this lack of information. This is a commonly accepted strategy as long as the assumptions are verified later on in the process. For this reason a distinction is made in the workshop between facts and assumptions about user experiences. We also included a 'questioning' step which makes explicit which assumptions need to be verified.

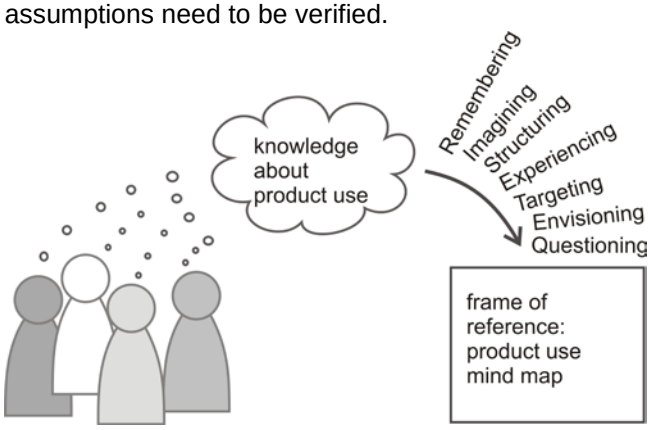

Figure 1: in the envisioning use technique implicit knowledge of product use is brought together in a 'product use mind map' through a combination of workshop steps

WORKSHOP STEPS

In the Envisioning Use workshop, a shared vision on user experiences is created by combining different techniques to elicit stories and scenarios and to set 'target' user experiences. The steps are remembering

(gathering stories), imagining (thinking up other scenarios), structuring (organizing the product use mind map), experiencing (role-playing and exploring scenarios), targeting (deciding upon desired user experiences), envisioning (creating product or interaction solutions) and questioning (identifying knowledge gaps). The individual steps are based on existing techniques such as story-telling (Erickson, 1996) and role-playing (Iacucci, Kuutti et al., 2000; Simsarian, 2003). The strength of the workshop is in the unique combination of these techniques which stimulates the exploration of use situation – user experience connections.

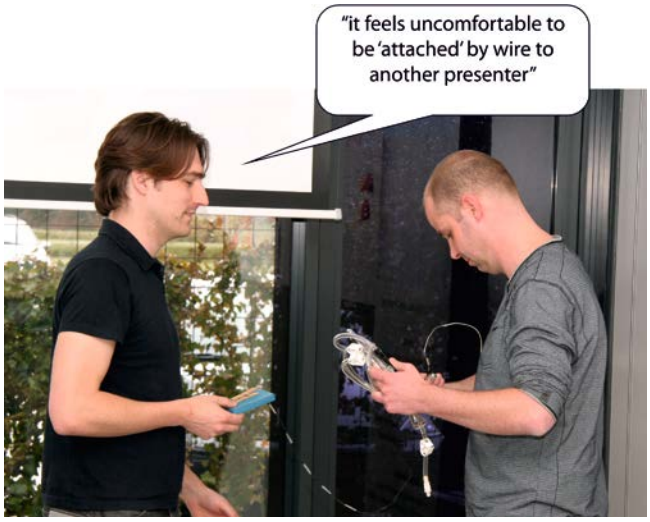

Figure 2: workshop participants role-playing a scenario of a presentation microphone in which a presenter hands over the microphone to a next presenter.

RESULTS

The technique was developed in six iterations with experienced designers in both academic settings as well as design studios. When that development process had led to a satisfying workshop format, we evaluated the workshop in three real design projects in different companies (van der Bijl - Brouwer, Boess et al., 2011). These evaluations led to the conclusion that the workshop technique is successful in creating a shared vision on experiences during product use, as illustrated by the following quotes from different participants:

"as a group you get a lot more [...], like everybody has this knowledge and it's just a good way to step back and see opportunities and create new ideas with actually a lot of things you already know"

"Normally I am used to think about the use by myself, but now the whole team could contribute"

"The workshop helped in generating a shared view on product use, as there was room to discuss the experiences and the influence on how you feel"

DISCUSSION

The Envisioning Use technique was developed as part of the 'Design for Usability' research project and originally aimed at exploring all qualities of product-user interaction that largely depend on the user and context of use, including user experiences, usability and performance. In the workshop at the Design & Emotion conference 2012 we will focus on the user experience qualities and discuss how to explore and share user experiences in product development teams. We would like to discuss the following topics:

- What is the importance of a shared vision on user experiences in product development teams?

Our research showed that design teams who created a shared vision on product use by means of the Envisioning Use technique, indicated they experienced that this shared vision had a positive influence on later decision making with regard to product use, and possibly inspired solution generation. We would like to discuss these intended effects and other unintended effects of the shared vision.

- What would be an appropriate combination of techniques to get to a realistic shared vision of user experiences? To what extent are workshop formats such as the Envisioning Use technique appropriate for stimulating empathy in multidisciplinary product development teams?

Although the Envisioning Use technique is aimed at generating a shared vision on end-user experiences, the end-user is not involved directly in the workshop. The shared vision on user experiences depends solely on the user experiences that are gathered from end-users preceding to the workshop, or from user experiences before or during the workshop of team members themselves. We would like to discuss which additional techniques could be employed as valuable

input to the workshop, in order to get to a realistic vision on user experiences.

- How does the workshop contribute to the shared vision on product experience?

The Envisioning Use technique has proved to be successful in creating a shared vision on product use, including user experience. However, we do not understand yet why and how the technique achieves this goal. We presume that an important workshop aspect that contributes to its success is its interactive character. This could be explained by means of for example the theory of co-experience (Battarbee and Koskinen, 2004) which states that meanings of individual experiences emerge (and change) as they become part of social interaction. The social aspect of storytelling and role-playing in the workshop could enhance this social interaction and thus emergence of experiences; another possible explanation can be found in comparing the workshop to educational theories of active learning (Prince, 2004), which show for example that students remember more content when brief activities are introduced to a lecture. Likewise, transferring knowledge of user experience from team member to team member might also benefit from an active approach, such as within the Envisioning Use technique. We would like to discuss the possible mechanisms which underlie the generation of a shared vision on user experiences. This could possibly lead to adjusted techniques to further or otherwise enhance the shared vision.

REFERENCES

Battarbee, K. and I. Koskinen (2004). Co-experience: user experience as interaction. *CoDesign* 1, No. 1, 5-18.

Boess, S. (2009). Experiencing product use in product design. *Proceedings of the International conference on engineering design, ICED'09*. Stanford University, Stanford, CA, USA.

Desmet, P. M. A. and P. Hekkert (2007). Framework of product experience. *International Journal of Design* 1, No., 57-66.

Erickson, T. (1996). Design as Storytelling. *Interactions* 3, No. 4, 30-35.

Erickson, T. (2006). Five Lenses: Toward a Toolkit for Interaction Design. *Theories and Practice in Interaction Design*. S. Bagnara, G. Crampton Smith and G. Salvendy, Lawrence Erlbaum Associates, 301-310.

Green, W. S. and P. W. Jordan (2002). *Pleasure with products : beyond usability ed. by William S. Green and Patrick W. Jordan*: London etc. : Taylor & Francis.

Iacucci, G., K. Kuutti, et al. (2000). On the move with a magic thing: role playing in concept design of mobile services and devices. *Proceedings of the conference on Designing interactive systems: processes, practices, methods, and techniques*. New York City, New York, United States, ACM Press, 193 - 202.

Norman, D. A. (2010). The Research-Practice Gap: The Need for Translational Developers. *Interactions* 17, No. 4, 9 - 12.

Prince, M. (2004). Does Active Learning Work? A Review of the Research. *Journal of Engineering Education* 93, No. 3, 223-231.

Simsarian, K. T. (2003). Take it to the Next Stage: The Roles of Role Playing in the Design Process. *Proceedings of CHI 2003*. Ft. Lauderdale, Florida, USA.

Sleeswijk Visser, F., R. van der Lugt, et al. (2007). Sharing user experiences in the product innovation process: Participatory design needs participatory communication. *Journal of Creativity and Innovation Management* 16, No. 1, 35-45.

Van der Bijl-Brouwer, M. and S. Boess (2010). From remembering to envisioning product use: an informal design technique. *Proceedings of the 7th International Design & Emotion Conference 2010*. Chicago (IL, USA).

van der Bijl - Brouwer, M., S. Boess, et al. (2011). What do we know about product use? a technique to share use-related knowledge in design teams. *Proceedings of the 4th world conference on design research IASDR2011*. Delft University of Technology.